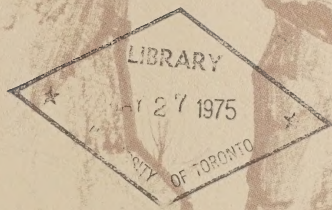


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Mono Cliffs



Ontario

newsrelease

For immediate release April 3, 1975.

Ministry of
Natural
Resources

MONO CLIFFS PARK MASTER PLAN RELEASED

Future development plans for a new provincial park called Mono Cliffs, 8 miles north of Orangeville, were released today by Ontario's Minister of Natural Resources, Leo Bernier.

"The result of over two years' study, this newest provincial park master plan incorporates many of the suggestions made by individuals and groups concerned with the planning of the park", said Mr. Bernier.

Plans for the 1,900 acre tract of the Niagara escarpment, situated 45 miles northwest of Toronto, were developed by the consulting firm of Dodds and Tomlinson, Aurora, Ontario in co-operation with the Ministry of Natural Resources' staff.

With a topographical range of 1,325 to 1,675 feet, Mono Cliffs is considered a scenic "gem". The area consists of about 2 1/2 miles of escarpment, including two outliers, or rock islands, and is part of the popular Bruce Hiking Trail.

The 50-page master plan is available from the Ontario Government Bookstore, 880 Bay Street, Toronto, at \$2.00 per copy.

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Office of the
Minister

Ministry of
Natural
Resources

416/965-1301

Whitney Block
Queen's Park
Toronto Ontario


Minister's Approval Statement for the
Mono Cliffs Provincial Park Master Plan

I am pleased to commend the firm of Dodds & Tomlinson for preparing a master plan for Mono Cliffs Provincial Park that aims at preserving the significant natural features and scenic qualities of the Niagara Escarpment in that area. It is significant that consideration has been given to providing outdoor recreational opportunities while retaining the tranquil rural character of the landscape.

The involvement of the public and municipal officials at various stages of the planning process has been valuable to the consultants and my staff, and I hope the interest expressed by various groups and individuals will continue in the future. The matter regarding the land-use control zone adjacent to the park will be referred to the Niagara Escarpment Commission and the local Municipality for their consideration.

I approve the master plan as the official policy for the development and management of the park and it is my sincere wish that through the implementation of the master plan, an outstanding park will be added to the provincial parks system.

Leo Bernier
Minister of
Natural Resources
December 16, 1974



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Mono Cliffs Provincial Park Master Plan

Ministry of Natural Resources
Province of Ontario

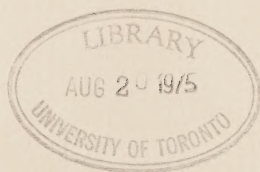
Minister Hon. Leo Bernier

Deputy Minister **Walter Q. Macnee**

Dr. J. K. Reynolds

[~~General~~ publications]
[G-26]

June 1974



Brian Dodds
David Tomlinson
Landscape Architects

Specializing in Northern Developments
Housing N.H.A. / C.M.H.C. / O.H.C.
Industry
Recreation

33 Yonge St. S., Aurora, Ontario L4G 3H4
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June 1974

Honourable Leo Bernier,
Minister of Natural Resources,
Whitney Block,
Queen's Park,
Toronto, Ontario.

Dear Mr. Bernier:

We are pleased to present our recommendations for the development of Mono Cliffs Provincial Park. Mono Cliffs represents a valuable opportunity to conserve for posterity an important part of our national heritage which lies within the rapidly urbanizing realm of Southern Ontario.

Because of the park's superb landscape scenery, a great effort has been made to produce a park which is sensitive to human needs and desires as they relate to the park's ecology and natural beauty; the cultural and physical history of the area, the needs and views of the immediate population and the mental and physical health requirements of the highly urbanized population of Southern Ontario have all contributed to the concept of the park.

We have aimed at producing a Master Plan which contains a series of practical guidelines for the park's development and future management.

During the course of the production of the Development Plan, we have had the opportunity to become acquainted with many members of your Park Planning staff and would like to thank them for their friendly help and assistance which was freely given.

Yours sincerely,

Brian Dodds

David Tomlinson

Brian Dodds

David Tomlinson



Old Pennsylvania barn and log cabin.

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Central bowl with part of escarpment in foreground.

Introduction

Purpose of Report

To communicate in easily understood terms the planning and design process we followed during the production of the Master Plan. The steps we followed may be summarized:

- A detailed survey and analyzing of the park's natural and cultural resources;
- An assessment of current recreational needs;
- Recommendations on how the park should be developed for recreation within the limitations imposed by the park's topography and ecology.

park users. An important aspect of this report is to create an informed interest amongst residents of the region and visitors to enable them to seek out and enjoy the inherent quality of Mono Cliffs Park.

Recommendations

- To preserve all the important geological and ecological features and the present landscape character of the park;
- To preserve the interesting areas of the humanized landscape having educational or cultural value;
- To provide a variety of passive recreational opportunities;
- To encourage interpretive and educational use;
- To retain the peaceful and tranquil quality of the park;
- To ensure that the views obtained from the vantage points are kept free from buildings, car parks and other man-made structures;
- To keep the park free from all through traffic and from use by snowmobiles and other forms of noisy recreational pursuits;
- To minimize the effect of the park's development on the local community.

We hope that our recommendations will continue to be translated into detailed design with the continued participation of the

Regional Context

Location

Mono Cliffs is a visual "gem" located on the Niagara Escarpment midway between the urban fringe of Metropolitan Toronto and Georgian Bay. It lies within an hour's drive from one of the fastest-growing conurbations in North America and within a ring of small market towns which are destined for expansion in the Toronto-Centred Region Plan¹.

Regional Planning

Because of the Toronto-Centred Region Plan¹, recreation trips of people seeking relief at Mono Cliffs and other Provincial Parks and Conservation Areas will be dispersed over a much wider area than at present. Designated growth centres such as Barrie and Orangeville will undoubtedly have a greater influence upon Mono Cliffs and the surrounding district than they do now. To the north of Mono lies a vast recreational area formed by the lakes and woods of Georgian Bay, which is rapidly reaching a state of over-or-ill-conceived recreational development. Influence from the east and west is more difficult to define. The influx of American visitors, mostly on their way to Muskoka or the prized fishing spots further north, are unlikely to be attracted by Mono Cliffs.

The other major regional factors which bear upon the future of this area are the findings of the Simcoe-Georgian Task Force² and the Niagara Escarpment Task Force.³ To date, there is no public information available detailing the impact of the development policy in Georgian Bay and North Simcoe except for some general objectives. It is not clear whether the Task Forces' recommendations followed by the findings of the Niagara Escarpment Commission³ will tend to encourage or discourage development in the locale of Mono Cliffs. The report of the Niagara Escarpment Task Force published by the Ministry of Treasury, Economics and Intergovernmental Affairs contains much of interest for Mono Cliffs; the goals and objectives expressed in this report support the development and conservation of the

natural features and educational opportunities. The topography, landscape quality, and features such as the Bruce Trail, make Mono Cliffs ideal for implementing design policies consistent with the worthwhile recommendations of the Niagara Escarpment Task Force.

The main problem at Mono Cliffs will not be one of too few visitors, rather the opposite. How can the Park be developed for recreation without spoiling, for the present and future generations, its quiet country charm and superb natural scenery?

¹Toronto-Centred Region Plan recommends a regional planning and development strategy for the Toronto area.





²To recommend a regional planning and development strategy for the Simcoe-Georgian area.

³The Niagara Escarpment Commission is currently reviewing the findings of the Gertler Report and Niagara Escarpment Task Force findings.



1 REGIONAL CONTEXT and MARKET AREA

LEGEND

-  PRIMARY MARKET AREA
-  SECONDARY MARKET AREA
-  NIAGARA ESCARPMENT
-  PROJECTED GROWTH AREAS

0 8 16 24 32 40 MILES
0 50 KILOMETRES

Local Context

Recreation Linkages

Map 2, The Local Context, delineates the relationship of Mono Cliffs to the towns, road network and recreational opportunities in the surrounding district. Mono Cliffs sits in the midst of a variety of conservation areas and is within close proximity of the Provincial fishing area at Pine River. The nearest conservation areas are the Orangeville Dam and Reservoir and Monora operated by the Credit Valley Conservation Authority. To the south is the dense texture of conservation areas on the fringe of Metropolitan Toronto; to the north is Earl Rowe Provincial Park, several small conservation areas and finally the myriad small lakes of Muskoka, Haliburton, Parry Sound and Nipissing.

Of key significance to the future role of Mono Cliffs is the proposed Boyne Valley Provincial Park which lies just five miles to the north near the town of Shelburne and the village of Primrose and close to the junction of Highways No.10 and No.89. The recreation features and development proposed for Primrose will affect the use of Mono Cliffs, and an attempt has been made at Mono Cliffs to provide complementary uses most suited to its natural and cultural resources.



- ★ PROVINCIAL PARKS
- ☆ PROPOSED PROVINCIAL PARKS
- * CONSERVATION AREAS
- PROVINCIAL FISHING AREA
- ▼ SKIING/SNOWMOBILE AREAS (COMMERCIAL)
- CAMP SITES (COMMERCIAL)
- BRUCE TRAIL

2 LOCAL CONTEXT



Park Site

Physical Conditions

The following is a brief description of the major physical conditions affecting the ecology of approximately 1,900 acres of the study area. The physical elements of geology, geomorphology, physiography, hydrology, soils and climate from the points of view of land capability and land suitability, help to determine a development theme compatible with the park's natural and cultural resources.

Geology

The Niagara Escarpment is the most prominent feature of Southern Ontario. Its rock was formed 430 - 490 million years ago by shells deposited by billions of small sea creatures that inhabited a vast tropical inland sea which covered most of what is now Southern Ontario. Since then, drastic climatic changes and the constant effect of sun, wind, rain, frost and ice over millions of years have gradually eroded the soft rocks leaving, in the park, an escarpment of hard Amabel limestone.

In the park the escarpment attains a height of over 1,600 feet above sea level. Most of its length is marked by sheer cliffs, in places soaring above the woods to a height of over 100 feet; its slopes at other points are buried either partly or entirely by block talus or glacially-deposited overburden. In some places, sections of the escarpment have become detached from the main face leaving deep crevices which are known as fracture or fissure caves.

While the escarpment may be described as a product of erosion, the remainder of the topography in the area results from the effects of glacial action and deposition. During the past million years, Southern Ontario has been covered at least three times by vast ice sheets which have caused tremendous erosion and deposition. The last of these glaciers occurring some 12,000 years ago, depositing most of the different sands and gravels to be found in the park area and creating most of its present land form. Eventually the ice

retreated east of the escarpment leaving in its path one of Ontario's major glacial spillways of which the routes, both upper and lower channels, are well defined, especially the lower channel which flowed south across what is now the eastern boundary of the site.

The extensive areas of sand and gravel below the escarpment were deposited by the melting waters of the spillway and these deposits are a major contribution to the good drainage pattern over most of the site.

The two outliers are of particular geological interest. Although outliers are to be found in other places along the escarpment, it is unusual for them to be so close to the main face of the escarpment. These outliers likely resulted from the ice eroding the areas of weakened bedrock, and furthered later by the rushing waters of the upper spillway, leaving only the two islands of hard rock.

Land Form

The topographic range within the park area is approximately 350 feet. The major elements of the physiography are:

- rolling upland plateau above escarpment;
- cliff faces along the escarpment;
- two outliers;
- undulating lowland.

Hydrology


The bedrock is one of the major factors that determine the distribution of both surface and ground water. Mono Cliffs is a groundwater recharge area. Springs are common near the base of the escarpment, and swamps tend to overlie areas of impervious shale. They are the source of the small streams and ponds in and around the park. There are seven man-made trout ponds in the park; the two located closest to Mono Centre provide part of its water supply. The only natural lake is situated

3 NATURAL LANDSCAPE

MAIN ECOLOGICAL AREAS


- | | |
|--------------------------|------------------------|
| 1 FERN RAVINES | 7 LAKE |
| 2 COLD CEDAR SWAMP | 8 SPHAGNUM SWAMP |
| 3 BIRCH BRACKEN PARKLAND | 9 CEDAR SAVANNA |
| 4 SUGAR MAPLE THICKET | 10 CATTAIL MARSH |
| 5 HAWTHORN SAVANNA | 11 MATURE CEDAR FOREST |
| 6 RICH SWAMP FOREST | 12 RICH CEDAR SWAMP |

 MIXED HARDWOOD FOREST

 AREAS OF PROVINCIAL SIGNIFICANCE

MAIN GEOLOGICAL AREAS

 SHEER CLIFFS  CREVICE AREA

 MANTLED SCARP  BLOCK TALUS SLOPES

 VANTAGE POINTS

0 1 2 3 4 MILE
0 2 3 4 KILOMETRE





Woodland path through central canyon.

on a break in the escarpment at the western end of the park. It is, in the main, a shallow kettle lake, the catchment area for which originates outside the proposed park boundary. Much better than average groundwater yields are available at Mono Cliffs. Due to steep gradients the groundwater flows at a relatively high rate and pollution is unlikely provided over-use does not occur.

Soils

As a result of glacial activity, over twelve different soil types have been identified. These range from various exceptionally well-drained sands and gravels to impervious shales and imperfectly drained sandy tills. Drainage is generally good over most of the park. Map 4, The Soil Capability, indicates the most fertile areas which are the most suitable for recreational use as they recover best from hard wear and the soils which are unsuitable for waste disposal; these two factors directly affect the position of buildings, toilets and car parks.

Climate

Mono Cliffs has a moist continental climate with short warm summers and long cold winters. The elevation of Mono Cliffs is relatively high with correspondingly lower temperatures and greater precipitation than the surrounding land. An average of sixty inches of snow can be expected annually. Microclimate is an important factor in the distribution of plant species within the study area. With slopes facing north, east, south and west, cold springs and well-drained sandy fields, the amounts of solar radiation received and absorbed vary considerably.

Ecology

Because Mono Cliffs is approximately halfway between the extreme southern and northern parts of the escarpment, its vegetation is unusual. It has the characteristics of the escarpment in general, but at this location, southern species reach the most northerly limit of their range and northern species extend further south than usual. The canyon-like formation has also trapped species that do not now exist locally outside the park. Thus Mono Cliffs is endowed with an unusually rich population of plants and wildlife. The limestone cliffs with ravines and fissure cavities in the rock faces provide an environment in which several rare ferns flourish. These cavities, with snow and ice often present until midsummer provide cool, moist, micro-climatic areas; ideal growing conditions for the ferns as well as many species of mosses and liverworts. On the walls of the ravines can clearly be seen the transition from species which prefer the more shaded, moist, cool conditions at the base to those species which thrive best in the warmer, dryer, upper portion of the cracks. Such ravines are particularly subject to the effects of human wear and will tolerate little or no disturbance.

Other deeper ravines are so well shaded by overhanging trees and rock walls, that nothing other than a few species of algae and lichens grow at the base. This type of bare cave-like crack offers more opportunity to visitors as they can be visited with little fear of causing damage to vegetation.

Most of the forest areas represent the natural succession of forest cover that existed over much of the surrounding land before it was cleared. Over thirty-five different species, both deciduous and coniferous are to be found. These trees have reached a size and maturity that is becoming increasingly rare to see in Southern Ontario.

The habitats within the areas are of a wide variety and include swamp and marsh, streams, ponds, meadows and the important rock faces. The mature hardwood and more restricted areas of cedar forest protect many animals and particularly nesting birds. This wide variety of habitat allows many different types of plants to grow; in total over 450 species of plants have been found. The flora might be exemplified by the variety of ferns; thirty species were found in a recent survey. In almost any other part of Southern Ontario only six to eight species can be expected.

Map 3, The Natural Landscape, indicates the most important ecological areas of both Provincial and local significance. These areas have been selected because they are considered to represent the best or sometimes the only example of a particular habitat or plant community found within the park. Two of the fern ravines are considered to be of Provincial significance as they contain several rare ferns and other unusual plants. Both these ravines are extremely fragile and public access must be strictly limited. These areas must be carefully conserved so that they can continue to provide an educational opportunity and be enjoyed both by present and future generations; although it should be noted that many of these habitats are seral communities and represent a stage in ecological succession. Areas such as the Hawthorn or Cedar Savanna which currently have a high interpretive, aesthetic and even scientific value may lose their significance as ecological succession slowly proceeds; dense maple stands or close cedar thickets being the most likely climax vegetation, when the species diversity of both plants and animals is less. Undoubtedly the best way to conserve these biological communities is to ensure that no areas of intensive use are located in close proximity; secondly, that all visitors are directed and, in places, restricted to clearly defined routes.

A comprehensive survey of birds and mammals has not yet been undertaken, but many birds

inhabit the area - bluebirds, woodcocks, whip-poor-wills, great blue herons, kingfishers, kingbirds and several species of warbler to name but a few. It is not unusual on a warm, late summer afternoon to see as many as six turkey vultures soaring on hot air currents generated by the cliff faces. Squirrel, racoon, woodchuck and porcupine are relatively common and there is evidence of recent beaver activity around the ponds near Mono Centre. During winter, deer and the occasional wolf are known to visit the area.

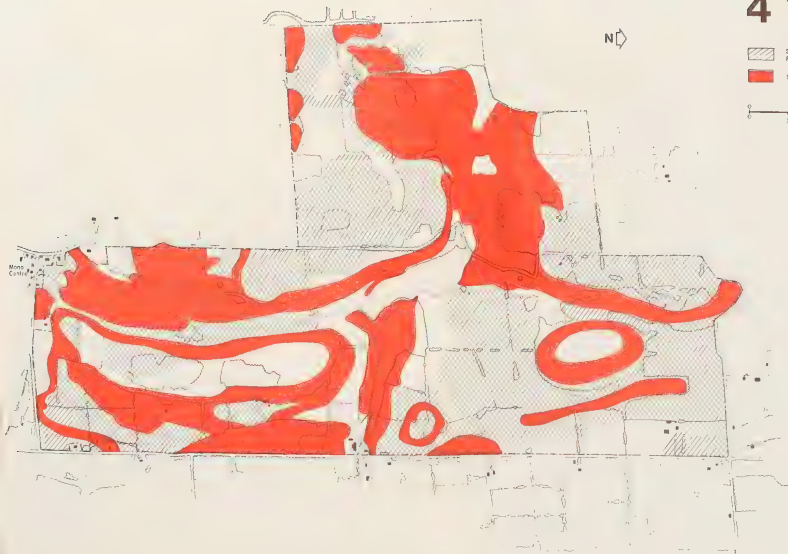
As Mono Cliffs is such an interesting area ecologically, it warrants further ecological research such as monitoring the effects which the proposed development will have upon the ecology of the site. The results of a comprehensive biological study would be invaluable for assessing the potential for development of future sites of this kind.

4 SOIL CAPABILITY

 SOILS BEST SUITED FOR AGRICULTURE AND RECREATIONAL USE

 SOILS UNSUITABLE FOR WASTE DISPOSAL

0 1 2 3 MILE
0 1 2 3 KILOMETRE



Cultural History

Prehistory

To date, no notable archeological remains have been discovered at Mono Cliffs despite repeated surveys of the area. Prehistoric visitations of a transient nature by nomadic paleo Indian, archaic, and middle woodland hunters and gatherers respectively probably did occur during the course of Ontario's 12,000 years of prehistory. Events of this early period must be extrapolated from the regional prehistory which would apply in a general sense to the Mono Cliffs area as well.

Evidence indicating permanent or semi-permanent aboriginal occupation based upon agriculture which became important only after 1,000 A.D. is also lacking. A number of factors have been suggested to explain the absence of extended Indian habitation in the area. The stream which traverses the area is much too shallow and narrow to provide an efficient and navigable transportation route. The land itself also proved a constraint posing technical problems which discouraged permanent settlements and agriculture of a sedentary nature. The rugged and varied topography, generally unsuitable soil conditions, and the dense vegetation cover in combination proved inimical to the establishment of a viable economy based upon agriculture.

Human Settlement

Although the area was surveyed in 1820 A.D. as part of Simcoe County, it was not until 1828 that any patents were issued on the land which now forms the park. The settlers were mainly Ulster Irishmen who emigrated in the mid 1800's. They came to an area of rough terrain with virtually no major roads to link them to the main centres of population. The escarpment did not generate a major settlement as it did in so many other parts of Southern Ontario. In this location, the escarpment provided neither water power to support a lumber trade or mill, nor mineral deposits that would encourage pioneer communities. Rather, the escarpment proved to be a great obstacle to transportation and a

physical restraint upon the amount of available fertile agricultural land.

Mono Centre

The village of Mono Centre remains as a legacy to the early pioneers who farmed the fertile agricultural valleyland. Because of locational weaknesses, isolation from a major road and the railway, it never developed beyond a convenience centre to serve the local farms. Today, however, it is one of those small quaint, quiet villages that are quickly being devoured by urbanization. Villages like Mono Centre are invaluable for conservation and preservation; not only for architectural history, but for their mood, scale and memories.

Humanized Landscape












The arrival of the settlers in 1828 brought about a change which, coupled with the park's geological and ecological characteristics, has produced the fine landscape character of the site today. One of the questionnaires returned after the public meeting at Mono Centre asked if the Landscape Architects could improve upon the present landscape at Mono Cliffs. The answer is NO!! All we can do is ensure that the landscape, to which the early settlers put the "finishing touches" by clearing the forest from the lower terraces and from the plateau above the escarpment, is not destroyed by unwise development.

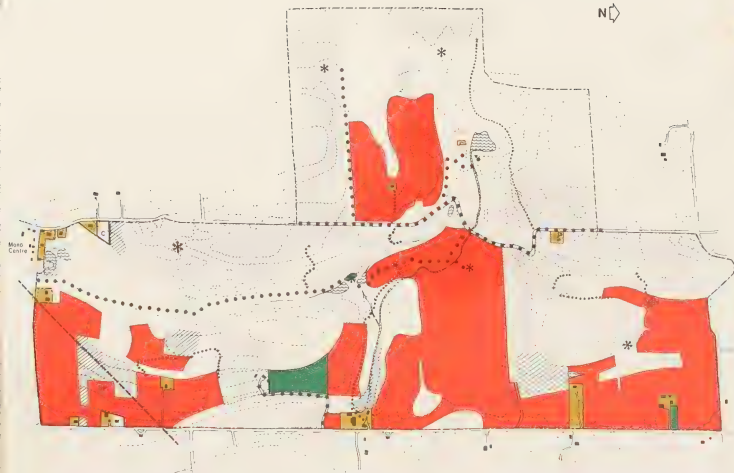
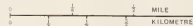
The park area shows an interesting cross-section of the changes that have affected most of Ontario's agricultural land over the years, from the time of the early pioneer settlement to present-day trends of softwood plantations and recreational use. These changes as indicated on Map 5, The Humanized Landscape, took place in the following pattern:

- Settlers cleared land for agricultural use;
- Land used mainly for arable farming;

5 HUMANIZED LANDSCAPE

LEGEND

	RESIDENTIAL		CEMETERY
	COMMERCIAL		WATER
	ORCHARD		SAND PIT
	FORESTRY		ROADS & TRACKS
	ARABLE		FOOTPATHS
	PASTURE		RECREATION
	NEGLECTED PASTURE		ABANDONED BUILDINGS
	HYDRO POWER LINE		



- The arable land slowly converted into pasture;
- The pasture on the poorer land neglected and becomes invaded by scrub;
- Rough pasture planted with coniferous trees;
- Land used for recreation.

Buildings

Apart from the general character of Mono Centre there are five buildings in the area worthy of special mention:

- The general store in Mono Centre, circa 1850, appears structurally in good condition and still retains its original community atmosphere and function;
- The Pennsylvanian barn, circa 1850, was a fine example of vernacular architecture but has deteriorated badly due to neglect. More recently its condition has worsened and a considerable proportion of the barn has now collapsed and is beyond repair.
- Piggery. This cabin, circa 1830, was a relatively humble undertaking both with respect to size and type of construction. It originally stood on a different site. It illustrates the effects of weathering and changing human needs, but would require relocation;
- The old schoolhouse, at the southwestern corner, circa 1927, is a typical example of an old village schoolhouse, now used as a residence;
- The Victorian farmhouse at the north-eastern corner, circa 1860, with old log house and surrounding barns, forms a condensed history of Canadian farm development.

There are several other buildings within and adjoining the park boundary which have no historical significance, some of which are comparatively modern homes. There is no apparent reason why all the homes located on

the eastern and southern boundaries in close proximity to the Township roads should not remain in private ownership. The two houses which encroach deeper into the site near the eastern edge of the two outliers, the Victorian farmhouse in the northeastern corner and the house overlooking the trout pond adjoining the eastern boundary should be included within the park. Private houses in these locations could result in friction developing between the owners and park users. Three out of the four houses which are located within the site boundary would provide suitable accommodation for the park staff who would then be in a position to provide all year-round supervision. The house adjoining the southern outlier appears to be in a poor state of repair and its location interferes with pedestrian circulation. It is therefore recommended that this should be demolished. The farm will be retained as an active stock farm. The group of barns and stockyard on the eastern boundary could be used for maintenance and storage depot. They should not be allowed to continue to be used as a stockyard as this use is causing considerable pollution to the adjoining stream. There are remains of an old ski tow which according to local residents apparently failed through lack of capital.



Victorian farmhouse and outbuildings.

Development Potential

Market Analysis

Can the success of a park be measured by the number of annual visitors it attracts? Surveys have indicated that in 1971 the Maple District had close to two million visitors. Many of these demanded camping, swimming, fishing and other popular recreational activities. An increase of camping and other facilities are being provided in the Provincial parks often with detrimental results upon the park's ecology. The capacity of these parks cannot satisfy the current demand. With an increasing population, a shorter working week and rising affluence which puts the ownership of boats, snowmobiles, or a skiing outfit within reach of more and more people, pressure upon the remaining natural resources is bound to increase. A more recent survey¹ conducted in 1972 revealed that the demand for both active and passive recreational facilities was still rising.

To develop all available parks and park areas without due respect for topography, ecology and site material resources to meet this avalanche of various recreational demands can only lead to disaster. It is far more desirable to produce a system of parks which contain a well-balanced pattern of recreation development. Some of the parks, but not all by any means, should be located in areas of outstanding natural scenery but these should be balanced against areas located away from housing which, though scenically pleasant, have little or no ecological significance but have a terrain which is ideal for snowmobiles and other recreational vehicles. A park system which is based upon each park containing the uses for which it is most suitable, will better protect our natural heritage whilst making better use of capital expenditure.

Against the rising pressure for active recreation we can only hypothesize that there is a market vacuum to be filled by a natural environment park oriented towards recreational activities requiring limited facilities and that the demand for this type of park will rise in the future. A

steady stream of requests to the Ministry of Natural Resources and reaction at the public meetings both at Mono Centre and Toronto tended to support this view. Many writers on leisure and recreational activities suggest that people can use their leisure time to improve their quality of life. In this regard, we have an opportunity at Mono Cliffs to create a park where people can escape from their cars, the pressures of urbanization, and explore on foot an extensive system of trails through a variety of landscape scenery or just enjoy the sun and the surrounding beauty of nature.

¹ Participants in Selected Outdoor Recreational Activities, Toronto Census Metropolitan Area and Ontario - 1969 - 1972"

Development Strategy

Goal

To develop Mono Cliffs for recreational use within the limitations imposed by the park's topography, ecological, natural and cultural resources.

Goal Implementation

There are opportunities for campers and other forms of intensive recreation in the market area. This leaves an alternative and exciting opportunity to develop Mono Cliffs in a more sympathetic way. The logical starting point is the character, natural features and charm of the park. In aesthetic appeal, the park site rates highly with other areas of the Niagara Escarpment. Its chief attributes being the variety of fine views over forest and farmland, the general mood of tranquillity and the feeling of being one with Nature that cannot be escaped. The rocky outliers create a canyon-like effect that is not common along the escarpment, and the open pasture offers a quiet, pastoral setting.

There is a great opportunity to emphasize both the summer and winter potential of this natural environment for passive recreation. There is an excellent variety of flora and fauna of educational and scientific worth and rugged interesting topography. These features combined with heavy falls of snow in winter offer scope for both summer and winter recreation. Winter use is becoming an increasing factor as more Canadians become aware of our "Winter Wonderland". The development of trails, siting of picnic areas at interesting nodes in the natural landscape, and the subjugation of the automobile and its intrusive qualities, are attractive ideas both to the naturalist and outdoors-lover. These are scarce commodities. They also have the power to create a market where there has not been an overt one before, especially with the back-to-nature movements and the increased sensitivity of all people to the value of our natural heritage.

Consistent with our philosophy of site suitability, recreation on this site would be of a passive rather than intensive organized

nature with continuance and development of hiking, along with snowshoeing, cross-country skiing and orienteering. To this we can add bird watching, nature trails and tobogganing on open slopes; emphasis being placed upon the natural qualities and the absence of "machinery" - i.e. noise of snowmobiles and cross-country vehicles, manufactured playground equipment, etc. The basis for our concept is the increasing social value being placed on retreats from the fuss, noise and grime of the urban scene. To this end our broad objective is to provide guidelines for conservation and to avoid development which conflicts with the natural state of the park.

Objectives

- To preserve all the important geological and ecological features and the present landscape character of the park;
- To preserve the interesting areas of the humanized landscape having educational or cultural value;
- To provide a variety of passive and nature-sensitive recreational opportunities;
- To encourage interpretive and educational use;
- To retain the peaceful and tranquil quality of the park;
- To ensure that the views obtained from the vantage points are kept free from buildings, car parks and other man-made structures;
- To keep the park free from all through traffic and from use by snowmobiles and other forms of noisy recreational pursuits;
- To minimize the effect of the park's development on the local community.

Park Classification

The park encompasses an area of outstanding natural beauty and has been designed primarily for passive recreation and educational use. It is therefore recommended that under the present Ontario Provincial Park Classification System it shall be classified as a Natural Environment Park.

Park Zoning

The park has been divided into three zoning categories, Map 6, based upon the Ministry of Natural Resources' current zoning system; each zone being designated according to the criteria of values for preservation, recreation and cultural development.

- **Development:** There are two fairly extensive areas which are well screened from the major vantage points by rising ground or dense woodland. These are both well drained and are situated so that the trail system, while passing close by, does not have to pass directly across them. The access roads, car parking, and the walk-in camping facilities are located in this zone.
- **Hinterland:** This covers most of the land cleared for agricultural use. This land, in the main, is reasonably fertile and will be able to stand the most wear. The use of this land is divided between grazing lands and open areas which may be used for casual recreation and picnicing.
- **Natural:** This covers most of the woodland, rough grass areas and other key ecological habitats. Access through this zone must be restricted to a well-defined trail system as unlimited access will soon result in the general disturbance and deterioration of these areas.

Recommended Land Use Control Zone

The views obtained from the various vantage points extend well beyond the park's boundaries especially at the northern and northeastern corners of the site. If the

visual integrity of the park is to be retained it is essential in these two areas that planning permission is not given to allow development of any kind including private recreational development. The purchase of the development rights whilst allowing existing private use and ownership should be undertaken.

Mono Centre and Surrounding Area

The Provincial policy to encourage the growth of Orangeville will increase existing pressures for residential and recreational development in the immediate environs of the park. The additional planning restraints contained in the Niagara Escarpment Act will enable the Mono Township Council to ensure that any development which is allowed to take place does not destroy the character of either the park or Mono Centre.

6 ZONING

PARK ZONING

-  DEVELOPMENT
-  NATURAL
-  HINTERLAND

HISTORICAL BUILDINGS

- 1,3,5 RUINED FARM BUILDINGS
- 4 ABANDONED HOMESTEAD WITH LOG CABIN
PIGGERY AND SITE OF PENNSYLVANIAN BARN
- 2,6 RUINED ICE HOUSES OR KILNS
- 7 VICTORIAN FARMHOUSE
- 8 OLD SCHOOL HOUSE*
- 9 GENERAL STORE*
- * outside park boundary

ROAD CLOSURES

- ● ● WITHIN THE PARK
- ○ ○ WITH AGREEMENT OF ADJOINING LANDOWNERS

PARK BOUNDARIES

- ORIGINAL BOUNDARY
- - - RECOMMENDED BOUNDARY

ADJOINING LAND

-  RECOMMENDED LAND USE CONTROL ZONE



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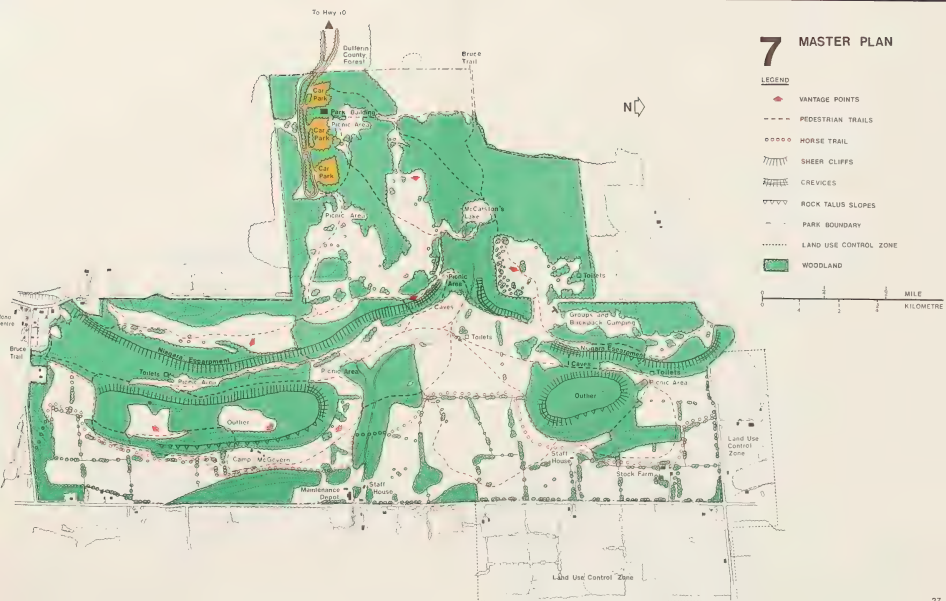
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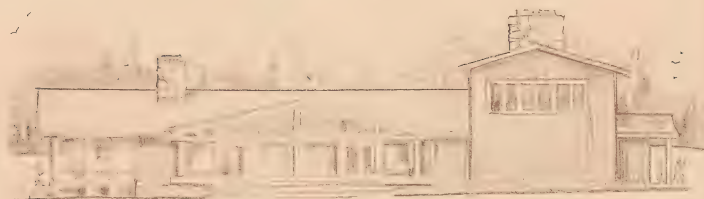
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7 MASTER PLAN





Multi-purpose building.

for an additional 100 to 200 cars should be provided, the exact number depending upon the results of the survey. This process should be repeated until the fixed carrying capacity is arrived at. Carrying capacity will be fixed at a ceiling of 500 cars (1,800 visitors) even if the ecological carrying capacity is greater. Beyond this number, the car parking and adjoining park areas would tend to become congested with visitors having the effect of crowding, reducing the natural charm of the park and lessening the enjoyment of the individual visitor.

The design and division of the parking areas needs very sensitive handling. Rather than providing a single car park for 200 cars, several smaller car parks in units of 40 to 60 cars should be provided and designed so that the occupants can leave their car safely without having to recross the car park to gain access into the park. As the car park will only be filled to capacity during peak periods, the installation of a drop-bar pay-as-you-enter control system should be investigated to reduce manning costs.

Once the available car parking spaces have been filled, visitors will need to be directed to other Provincial parks and conservation areas in the immediate area. This will necessitate an improved, efficient public information system and closer liaison between park and conservation areas.

External Car Parking

Restricting the amount of car parking within the park could result in an increase of casual car parking at both Mono Centre and on the adjoining township roads. This type of car parking would defeat the object of the Master Plan and it should be rigidly controlled by the creation and enforcement of local bylaws prohibiting indiscriminate car parking.

Car Park Construction

The car parks are located on reasonably well-drained land and construction should be limited to a gravel car park nearest to the multi-purpose building. This car park should be kept clear of snow for winter parking.

The other car parks should remain as grass but enforced with gravel when necessary to prevent excess wear.

Architectural Theme

All new buildings must be designed to meet the visitors' basic needs and be flexible enough in layout to absorb any changes in future use. They must blend into the natural surroundings and should be built of wood or other natural materials and have some of the characteristics of rural buildings.

Multipurpose Building

Located close to the car parks, it has been designed to accommodate a wide variety of uses within a very basic layout and will provide the following visitor's facilities:

- A large heated multi-purpose space which can be used for lecturing, meetings, or dining room in winter;
- A small snack bar and storeroom;
- Utility room for first-aid, information centre, etc.;
- Toilets accessible from both inside and outside;
- Male and female changing rooms;
- Boiler room.

Rather than providing separate picnic shelters, the building has three covered outdoor picnicing terraces; one of these having a large open fireplace for winter use. One of the terraces could be used as a ski waxing area if desired.

Staff accommodation has been provided on the second floor of the building.

Campsite Building

The existing "A"-frame building, which blends in with the general landscape, will provide a nucleus of accommodation which could be used as a general common room.

An extension based upon the Ministry of Natural Resources' standard 32-man staff house is proposed to provide bunkhouse accommodation with washroom and shower facilities for 40 visitors.

Toilets

The Ministry of Natural Resources' existing design for vault toilets blends in well with the character of the park and it is proposed that these should be used.

Picnic Areas

To reduce the danger of fire all the picnic areas with barbequing facilities have been grouped around the car parking area. Initially 100 sites in cluster groups of 8 - 10 per acre should be provided and spaced or planted so that each has an element of privacy. Half of these should be equipped with barbeque facilities; the final number of picnic spots to be provided according to demand. Additional picnic tables without barbeque facilities have been located wherever possible near the natural springs throughout the park for visitors who prefer to carry a packed lunch and thermos flask. The tables should be moved regularly to prevent overwear of surrounding grass. Toilet facilities and water points are to be provided in the picnic areas. Additional toilets are positioned at strategic points elsewhere within the park.

Outdoor Lecture Area

A small outdoor lecture area should be provided for use in the summer months.

Trails

An extensive trail system forms the backbone of the park's recreational facilities; a system designed to encourage use of the park by pedestrians, hikers, cyclists, cross-country skiers and horse riders. It will be closed to all forms of motorized vehicles. The trails follow the natural terrain incorporating as many of the existing routes as possible. A width of 4 to 5 feet is adequate for new trails over most of the

park, being slightly wider when adjacent to car parks; care should be taken during construction to remove as little of the existing vegetation as possible. Over streams simple plank bridges are to be provided and where the ground is marshy, short lengths of boardwalk will be necessary. The smaller wet areas or areas which begin to show signs of excessive wear should be reinforced with self-binding gravel, as soon as the wear starts. Through woodland areas, alternative parallel routes must also be created so that sections may be temporarily closed to allow regeneration to take place. Trails should be reinforced along their length using wood chips or bark chips to maintain their character. On the escarpment, trails leading to caves or other popular geological formations are to be constructed of self-binding gravel with steps and retaining walls formed from the natural rock on the site. Wooden handrails may be necessary on some of the steeper slopes. Access to caves, ravines and other geological features is to be confined to those which have already been subject to or can tolerate disturbance rather than allowing uncontrolled access to all. The trails which cross the grass areas to be mown slightly lower than the surrounding grassland if wear does not bring about this condition naturally. At pedestrian access points on the boundary, and where trails cross over fences, simple robust wood stiles are to be provided. Mile markers will inform hikers the distance they have covered.

The main trail from the car park down and through the canyon route should be made suitable for use by wheelchairs; some of the toilets should have special facilities for disabled visitors.

Bruce Trail

This internationally outstanding example of a long-distance trail (Niagara to Tobermory) passes through the park. Its users will find the park an ideal setting to tarry a while even to spending the night. It is recommended that a more interesting cross-country route between Mono Cliffs and Primrose away from the existing sideroads be found.

Horseback Riding

A north-south horse trail along the escarpment would undoubtedly be a boon to many especially if it can be linked to the Great Pine Ridge Trail system. A bridle way, for horses only, is provided along the eastern edge of the outliers.

Vantage Points

Locations which offer vistas and spectacular panoramas have been retained as vantage points. Foreground vegetation which obstructs views should be carefully and selectively removed.

Sign Posts

Signs within the park are to be kept to a minimum, used mainly for public safety and to protect ecologically fragile areas. They are to be designed using natural materials and colours and of simple construction.

Wild Life Conservation

Every effort must be made to ensure that the park area retains or increases its present population of wildlife. This can best be achieved by retaining the existing vegetation in as near an undisturbed state as possible as this forms much of the basic key habitat. All new woodland is to consist primarily of deciduous tree species indigenous to the site with only a few intermixed evergreen species. Thicket plants, especially those which provide food, shelter, and breeding sites are to be planted in groups, between the trees, especially along the woodland's edge. Nest boxes of various sizes could greatly increase the population of hole-nesting birds, possibly wood duck around McCarston's Lake and at Mono Centre. Mono Township, mainly due to the efforts of individual naturalists building up a network of nest boxes, has become one of the strongholds of Ontario's bluebird population.

A small island not more than 10 yards in diameter created in McCarston's Lake would provide a safe roosting and possible nesting place for waterfowl. Its location, construction and complexity to be reviewed by

competent biologists. A floating island may be preferred if deep silt exists. A winter feeding station is to be provided near the Interpretive Centre so that visiting parties of children and adults will have an opportunity of seeing some of the wintering birds.

The small sandpit in the southeastern corner should be retained and the sand faces reshaped to leave a nearly vertical face conducive to nesting sites for bank swallows and kingfishers.

Grazing Lands

Along the eastern boundary the existing three hundred acres of pasture is to continue to provide grazing for horses and cattle. The possibility of maintaining a sheep or deer herd was also considered, but not recommended. By retaining this area of the park in agricultural use, a strong visual link will be formed between the park and the surrounding agricultural land and should enrich the educational experience of school groups and other visitors. The land will support 50 - 80 cow and calf herd for beef production. The grazing land could be leased to a local farmer or cattleman. The herd would not fully support a man and family, but would be suitable for a semi-retired farmer or experienced cattleman who might obtain supplementary employment in the park. The head of cattle per acre is subject to quality of grazing and will increase as weed control and regular fertilizing bring back native grasses and the pasture improves. Farming activities are to be centred in the Victorian farmhouse and yard in the northeastern corner of the park and should be confined only to grazing and hay production.

Fencing

Only fencing which is similar in general character to the fencing existing in the district is to be used. To reduce indiscriminate access and confine the cattle, standard wire stock fencing on cedar posts spaced at the maximum of ten-foot intervals is to be erected along the whole of the southern, eastern and the part of the northern boundary which adjoins pastureland; also this type of fencing should be used along all the park boundaries which adjoin land

in agricultural use. Boundary fencing is not proposed where the boundary passes through marshy areas or along steep slopes. The internal field fences should be of similar construction to the boundary fencing, excepting the fields which adjoin the farmhouse and yard. These should be fenced with cedar posts and rails. It is essential that fences are provided where the grazing land adjoins the woodland to prevent cattle damaging the woodland. Stiles will be provided at all points where the system of trails cross fence lines. Where newly planted wooded areas adjoin public roads, the boundary will have at least four rows of thorny shrubs. It also might be necessary to provide a post-and-wire fence until the trees become established.

Dead Elms

The dead elms in the field fence lines are to be replaced at the earliest opportunity by replanting with basswood, red maple, red oak and American ash. In the wooded areas and in the fields which do not adjoin trails some of the larger dead elms should be allowed to remain undisturbed - the effects of the disease is now so widespread on the site and adjacent lands that the complete removal of all the dead trees will have little effect upon disease control. The dead trees do however provide an important habitat particularly for the Pileated and other species of woodpecker whose borings in turn provide breeding accommodation for other species of birds and mammals.

Activities

Visitor Service Programme

All activities should be programmed so that orientational information can be made available to visitors.

Interpretation

Essentially a communication programme designed to assist visitors, it will help to develop an awareness and understanding of the natural, cultural and recreational resources, from which we hope better use and stewarding of these resources will follow.

This park is especially attractive to hikers and nature-lovers but it will also attract many visitors who have little or no knowledge of the natural environment. The interpretative programme should be designed to increase the knowledge of the informed naturalist, at the same time being basic enough to hold the attention of the less informed visitor.

The emphasis of the interpretative programme should be based upon the following:

- Formulating an understanding of how the park developed its geological and ecological characteristics over a period of millions of years;
- How the basic geology together with the climatic factors control the various plant communities;
- How the basic geology and ecology together with the activities of man control the habitats available to wildlife;
- Indicate how the geology and ecology affected the pattern of human settlement in the area;
- Demonstrate how in a comparatively short period of time man has affected the natural landscape by developing an ever-changing pattern of land use to meet his changing economic and spiritual requirement;
- Explain why conservation and

preservation are necessary;

- Encourage a respect for our natural environment.

Interpretation in the park is to be considered as an extension of the interpretive programme to be provided at the new Provincial park at Primrose. It is not intended that a special building with staff and other facilities be provided at Mono Cliffs, but that the multi-purpose building and outdoor lecture area provide facilities both for visiting schools and the interpretive staff; both must work closely together.

Brochures should be available for visitors who prefer a less formalized approach. These in addition to general interpretive information should emphasize the trail system indicating which routes are most suitable for hiking, nature studies and cross-country skiing.

Education and Scientific Use

The educational and scientific use of Mono Cliffs must respect the intrinsic natural qualities of the site if the integrity of the landscape is not to be violated. Visits by school parties must be co-ordinated. Increasingly Boards of Education are finding that it is better to teach nature studies "in Nature" rather than in a building; what better than a park for a classroom. Toronto children are taken for week-long sojourns to the Haliburton area and to the Boyne River School only a few miles north of the park; not only to learn about the science aspects of flora and fauna, but Nature's intangibles, to live in harmony and to communicate with fellow beings without the distractions of urban pressures and rules. Outdoor education must be looked upon as a method for enriching studies in all disciplines.

We have an opportunity to develop these aspects of education in Mono Cliffs Park. We recommend that close liaison with the Provincial Ministry of Education be maintained for long-range planning purposes, especially with respect to the development

of interpretive programmes. It is not recommended that buildings, for the exclusive use of Boards of Education be provided within the visual boundaries of this park. Establishing a residential school in the grassland area on the western boundary which is included in the park, but screened from the rest of the park by rising ground and woodland, is a possibility. The group-camping facilities would be made available to Boards of Education as well as other organizations.

Care must be taken by both the interpretive staff and the Boards of Education using the park to see that their programmes do not interfere with the pleasure of other park users.

Backpack and Group Camping

Camping on the site has been restricted to back-packers and group camping. Space is provided for two or three groups to camp at the same time, each group - maximum of 40 people - to have toilets and water supply and be in a distinct area of at least three acres enclosed by planting to provide privacy from neighbours. Space for 50 back-packing sites, two sites to the acre, are provided; these also to be isolated by planting from the group camps. Additional toilets and water points, safe fireplaces and firewood will also be provided. The firewood provided should not be cut under any circumstances from the park property.

Vehicles will only be allowed on the campground to deliver equipment and supplies to groups. A car may be garaged on the campsite but only for emergency use.

The existing "A"-frame building located on the campsites is to be used to provide a common room for all campers and extended to provide youth hostel-type bunkhouse accommodation for 20 males and 20 females. A warden would be required to supervise these additional features.

Camp McGovern

This campground is presently operated under an annually renewable lease by the Big

Brothers' Organization. Such private campsites are not desirable in Provincial parks, in that one group is favoured and the others excluded. The social value of Camp McGovern is very great and the Big Brothers are to be commended. It is recommended that they be allowed to retain the use of only their immediate camping area until they find another site on condition that they do not develop the campground any further.

Rock Climbing

We have no definite proposals for rock climbing but feel that this activity could possibly be accommodated providing that other more suitable locations are not available on other parts of the Niagara Escarpment. Climbing if allowed should be restricted to clearly defined areas; these being selected after discussion with rock climbing clubs and following a detailed ecological survey of the proposed location.

Cross Country Ski Racing

We feel that trails exclusively for this use should not be laid out. Events of this sort could occasionally be allowed in the park providing it occurs during periods when the closure of specific trails will not affect the enjoyment of other more casual users.

Childrens Fishing

The small size of most of the ponds on the site will not permit fishing to all visitors. Therefore fishing is being confined to young children only. The three central ponds to be stocked with small trout which will provide a pleasurable activity for the children, while their parents enjoy a little peace - maybe!!



Trout ponds to be used for children's fishing.

Maintenance

Maintenance Plan

The park has been designed in a form which will make it comparatively easy to maintain providing the simple maintenance plan, indicated on Map 8, is followed with reasonable care.

Grazed Areas

The whole of the eastern section of the park will be maintained by grazing; a form of grass cutting which saves mowing costs.

Mown Areas

- Close mowing at two to three-week intervals in good growing periods. The group camping, main picnic ground and the adjoining grass areas will require fairly frequent cutting to maintain a hard-wearing grass sward. It will also be necessary to have an annual spring and autumn fertilizing and turf aeration programme to ensure that these grass areas which will be subject to most wear do not deteriorate;
- Regular mowing at four to six-week intervals in good growing periods. The central grass bowl will require less mowing than the picnic grounds but the grass in this area should be kept comparatively short (approximately 6" average). Probably two or three cuts per year would be sufficient;
- Infrequent mowing - cut once every year or every other year with flail mower to prevent scrub invading the grassland. As these areas will have a high population of wild flowers, butterflies and other insects, cutting should take place in the early spring. Fall cutting would destroy seed heads which are a winter food supply for birds and animals. It might be necessary occasionally to dig out the roots of the scrub from time-to-time or to spot treat the base of cut down shrubs with biodegradable weed killer to prevent regrowth. It is essential that these areas are kept free of scrub to maintain the balance between

woodland and grassland.

Woodlands

These must be allowed to follow the natural ecological process of growth, decay and regeneration. Only dangerous trees which adjoin the trail system should be felled or made safe.

Road and Trails

No salt, weedkillers or other chemicals to be used on roads and trails throughout the park.

Reinstatement

Along the trail between the escarpment and outliers, and in the areas around the caves and immediately adjoining the central ponds, some reinstatement works will be required to areas which have already been worn by excessive pedestrian use. This reinstatement should be carried out so that the work blends in with the existing character of the park.

8 MAINTENANCE

GRASS AREAS

-  MOW 6-10 TIMES YEAR
-  MOW 3-4 TIMES YEAR
-  MOW ONCE YEAR
-  GRAZED LAND

WOODLANDS

-  NEW WOODLAND MAINTAIN UNTIL PLANTING IS ESTABLISHED
-  EXISTING WOODS ALLOW NATURAL ECOLOGICAL PROGRESSION

FENCING

-  CEDAR POST AND RAILS
-  STANDARD STOCK PROOF



Services

Waste Disposal

To service the multi-purpose building and camp washroom facilities, septic tanks and tile bed installation will be necessary. For sanitary facilities throughout the rest of the park, we recommend the use of pump-out vault toilets sited at strategic locations. An ample supply of robust garbage cans should be provided on picnic areas and campsites. These are to be emptied daily by maintenance staff and taken to a central storage and disinfecting facility. Removal from the park will be subject to an agreement between the Ministry of Natural Resources and the Mono Township Council or a private disposal company. Surface water drainage will be by means of ditches, natural swales, and water courses.

Water

There is a very good groundwater supply which will meet the needs of this park. New wells will have to be drilled as required.

Hydro

As a long-term aim, the high tension cables which cross the southeastern corner of the site should be laid underground or diverted away from Mono Centre, the park and the escarpment area generally. New hydro supplies should be laid underground along with all other existing overhead cables and wires within the park and along the boundary.

Telephone

Most of the existing telephone cables are underground; also all additional lines should be underground.

Fire Fighting

There is a high risk of fire in Mono Township during the dry months of summer. As the nearest fire station is at Orangeville, adequate equipment to fight grass fires must be kept at the park and all reasonable precautions taken including the training of staff.

Development Costs

Phasing

It is proposed that the development of the park be phased over a three-year period; the costs of the first phase of the developing being kept to a minimum to ensure that the park can be made available to the public at the earliest opportunity.

Phase 1

New Road

Through Dufferin County Forest to park boundary, approximately 1 mile long	\$ 78,000.00
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Park Access

From park boundary to car park, approximately 1,600 feet long	18,000.00
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Car Park

Gravel car park (200 cars), surrounding groundwork and landscaping	16,000.00
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Picnic Area

Mainly around car park	9,000.00
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Office

Entrance office and gate control point	16,000.00
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Trails

Construct stone steps and walk to caves, plank bridges, boardwalks	30,000.00
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Toilets

Construct two vault toilets in main park area and provide temporary toilets near car park	3,000.00
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Campsite Servicing

Water supply; toilets	30,800.00
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Fencing

Boundary and field fencing	25,000.00
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Tree Planting

132 acres of woodland and standard trees on fence lines with stock guards - Ministry-grown trees	21,000.00
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TOTAL	\$246,800.00
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Phase 2

Township Roads

Improvements to existing Township Roads direct from Highway No.10 to park entrance	\$ 80,000.00
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Park Access

Extend access road to second group car park	19,800.00
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Car Parking

Gravel-reinforced grass parking lots (200 cars) and surrounding groundworks and landscaping	14,000.00
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Picnicing Area

Picnic area mainly around car park	10,000.00
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Multi-Purpose Building

Construct building, servicing and landscaping surrounds	165,000.00
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Trails

Complete construction of trail system	20,000.00
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Toilets

Provide additional vault toilet	1,700.00
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Tree Planting

Complete fenceline planting	20,000.00
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TOTAL

<u>\$330,500.00</u>

Phase 3

Park Access

Extend access road to third group car park	\$ 21,800.00
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Car Park

Gravel-reinforced grass car park (100 cars) and surrounding groundworks and landscaping	8,500.00
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Picnic Area

Picnic area adjoining car park	6,000.00
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Campsite Building

Improve and extend existing building to provide bunkhouse accommodations with washroom, shower and toilet block accessible from outside	198,000.00
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TOTAL	<u>\$234,300.00</u>
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Operational Expenditure and Revenue

Expenditure

Permanent Staff

1 Superintendent	\$ 9,000.00	
1 Foreman	7,800.00	
2 Maintenance (farm workers)	15,600.00	
1 Gate Attendant	7,800.00	
		<hr/>
		\$40,200.00

Seasonal Staff

3 Gate Attendants for 24 weeks	\$ 8,640.00	
1 Campground Warden for 25 weeks	3,000.00	
1 Security Ranger for 25 weeks	3,000.00	
2 Visitor Services for 50 weeks	7,500.00	
		<hr/>
		\$22,140.00
		<hr/>
	SALARIES	\$62,340.00

Note: The above staffing levels assume that security and operating assistance will be supplemented during off-season by staff from proposed Primrose Park.

The annual cost of materials and services is estimated at \$15,000.00, based upon current costs in other Provincial parks. This cost will include such items as gasoline, sanitation supplies, telephone, hydro, minor equipment repairs, etc.

Capital Equipment

These costs should be included in initial development costs. Major items are as follows:

1 - 1½ ton truck	\$ 3,300.00	
1 - Farm tractor, equipped with P.T.O., mowing equipment and snowblower	14,000.00	
1 - Steel hydraulic dump trailer for tractor	4,500.00	
1 - Slip-on fire tank unit	2,000.00	
1 - Electric maintenance cart	2,500.00	
2 - Power mowers	2,000.00	
Shop Equipment	5,000.00	
		<hr/>
	TOTAL	\$33,300.00

Revenue

Total operational costs will be in the region of \$77,000.00 per year excluding the repayment of development costs and depreciation on plant and equipment. The limited car parking will provide the main source of revenue and at maximum capacity it will only earn approximately \$45,000.00 to \$50,000.00 per year. This will not cover operational costs. The beef farm should cover its own cost and may make a slight profit. If the Youth Hostel is developed it is unlikely to cover the cost of wardening and may even need some financial assistance. It is unlikely that the park could ever be a viable proposition financially, but just as a park's success cannot always be gauged by the number of visitors it attracts, neither can its value always be measured in dollars and cents.



Looking out from a shaded crevice cave

Acknowledgements

We would like to acknowledge the co-operation and valuable contributions made by the following people who provided us with essential technical and detailed background information which made the production of this Master Plan possible:

Ministry of Natural Resources

Alan Peacock	Director, Central Region
Tom Lee	Director, Park Planning Branch
George Elliot	Deputy Regional Director, Central Region
John Featherston	Regional Park-Recreation Co-ordinator
Sabu George	Recreation Planner
Norm Richards	Park Planning Branch
Jack van der Meer	Park Supervisor, Huronia District
Fred Bishop	Interpretative Planning
Don Cuddy	Ecological Assessment
Blair Dawson	Fish and Wildlife
Darija Kovacevic	Architectural History
Garry Greenland	History
Bruce Pattern	Geology - Hydrology
Bill Warren	Geology - Geomorphology.

Specialist Consultants

Architecture	William Moffet, Architect Moffet and Duncan Architects, Toronto
Engineering	Gordon Proctor, Engineer The Proctor and Redfern Group, Toronto
Illustrations	Dorothy Clark McClure, Artist, Aurora
Recreation Planning	Arthur Muscovitch, Architect/Planner The Designers, Toronto
Soils	Dr. Douglas Hoffman, Soil Scientist University of Guelph.

Submissions

We would also like to thank the following public authorities, private associations and individual citizens who submitted briefs,

met or corresponded with us:

Algonquin Wildlands League
Boyne River Outdoor Studies School
Bruce Trail Association
Canadian Cycling Association
Canadian Family Camping Federation
Canadian Ski Association
Canadian Youth Hostels Association
County of Dufferin Roads Department
Credit Valley Ski Club
Federation of Ontario Naturalists
Ministry of Agriculture and Food
Ministry of Transport and Communications
Mono Township Council
Mono Taxpayers Alliance
National Campers and Hikers Association
Nature Conservancy of Canada
North York Board of Education
Nottawasaga Conservation Authority
Ontario Hydro
Ontario Trail Riders Association
Quetico Foundation
Rideau Trail Association
Thames Valley Trail Association
Mr. J. Ambrose,
Mr. E. Berger,
Mr. J. W. Duncanson,
Mr. and Mrs. R. Hansen,
Miss K. Lindsay,
Marjorie Luiell,
R. L. MacFeeters,
Mr. E. Reid,
Mr. L. A. Smith,
Mr. and Mrs. K. Thompson.

Finally, we would particularly like to thank the residents of Mono Township and all other interested persons who took the trouble to attend the public meetings at Mono Centre and Toronto; and those who submitted points of interest and observations on the draft Master Plan which was circulated for comments. It is only by hearing as many points of view as possible that we, as Consultants, can hope to achieve a Master Plan which is acceptable to both the local residents and other park visitors.

Public Meetings

Held At

- Community Hall, Mono Centre, Mono Township, November 19th, 1973;
- Queen's Park, Toronto, November 21st, 1973.

Three possible concepts on how the park could be developed for recreation were presented for consideration at the meetings.

Theme A

This proposal was based upon the original boundaries defined by the Ministry of Natural Resources and showed how the park could have been developed for passive recreation within the restrictions imposed by the defined lot boundaries. This resulted in a solution in which the car parking areas had to be located close to the centre of the park making vehicle and pedestrian separation difficult to achieve and the ecologically delicate areas could not be adequately protected due to the proximity of the car parking area.

The next two Themes were based upon our proposed boundary revisions which provided a more logical and easily defined boundary based upon the park's natural features and topography.

Theme B

Indicated how the park could be developed for intensive recreational use; it included a wide range of facilities - e.g. camping, swimming, downhill skiing, fishing and boating together with more passive pursuits like hiking and cross-country skiing. The disadvantages of developing the park in this way were forcefully pointed out, as developments of this type would be completely out of keeping with the park's natural and cultural resources and would result in the general deterioration of the park through overuse in a comparatively short time.

Theme C

Indicated how we recommended that the park be developed with the emphasis firmly placed upon the conservation of the park's topography, ecology, natural and cultural resources. Facilities for hiking, cross-country skiing, picnicing and nature study were provided together with camping sites for group and back-packers. Interpretative and educational use were also encouraged. All the access roads and car parking areas were located away from the more important ecological areas and the centre of the park and screened from the vantage points. Two access points were indicated but it was recommended that only the western access be retained.

The general consensus of opinion at both the public meetings appeared to be in favour of Theme "C" with only one access point and the returned questionnaires confirmed this. Over 81% were in favour of Theme "C"; 8% were in favour of Theme "A" and only 2% favoured Theme "B"; 9% of the returns indicated no preference, several of these rejected all Themes for a variety of reasons. Other interested returns concerned the use of snowmobiles, horse riding and rock climbing. Of those who answered specified questions, 89% rejected the use of snowmobiles in the park; 63% were in favour of a horse riding trail being provided and over 75% of the returns considered that rock climbing should be allowed in clearly defined areas. Almost 100% of the returns requested that a draft Master Plan be circulated for comments.

Reference

- Road Needs Study - 1969
- Selected Topics Related to Park and
Recreation Planning and Management.
- Guide to Conservation Areas.
Ontario Provincial Parks Statistical
Report 1957 - 1971.
Park Buildings - 1972.
- The Niagara Escarpment Study
Conservation and Recreation Report.
- To Save the Escarpment.
- The Niagara Escarpment.
The Toronto-Centred Region Plan.
- Pedestrian Impacts and Soil Carrying
Capacity.
- Prospects for Cross-Country Skiing
in Southern Ontario.
- Recreational Carrying Capacity of the
National Parks.
- Economics of the Beef Cow Enterprise.
- County of Dufferin - 1970
- Department of Lands and Forests - 1971
- Ministry of Natural Resources
- Professor L.O. Gertler
- Niagara Escarpment Task Force - 1972
- Ministry of Treasury, Economics and
Intergovernmental Affairs - 1973
- Howard R. Orr
- T. W. P. Brogden
- Theodore W. Sudia and James M. Simpson - 1973
- Ministry of Agriculture and Foods - 1973

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